

Work Order ID 132414

132414

Page 1

Item ID: D3393-1

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Battery Lock Casing

Start Date: 5/07/15 Start Qty: 6.00

6

Cust Item ID:

Required Date: 5/07/15 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3393	Rev A

100

0.00

100

BAND SAW

Bandsaw

Memo

0.02

Jeaspa Bandsaw

Cut blank: 1.500" x 1.500" x 3.125" long

6 0 JFC 201505-22

110

0.00

110

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.04

HAAS CNC vertical machine #1

Machine D3393-1 as per Folio FA510 and Dwg D3393Identify as D3393-1

Deburr

6 0 JFC 201505-22

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.00

Quality Control

6 0 JFC 201505-22

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Description Work Order Deviation				Disposition			Completed By																		
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Root Cause		FAULT CATEGORY																							
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Work Order ID 132414

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Page 2

Item ID: D3393-1

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N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Battery Lock Casing

Start Date: 5/07/15 Start Qty: 6.00

6

Cust Item ID:

Required Date: 5/07/15 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.00

Quality Control

6

Ø

DAS

44

9-89

15/05/15

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.00

Hand Finishing

6

FF

MAY 26 2015

150

Fire Red (Ref:4.3.5.10) per QSI005 4.3

0.00

150

Powdercoat

Memo

0.00

Powder Coating

START TIME:

1:50

OVEN TEMPERATURE:

FINISH TIME:

2:00

6

Ø

15-6-1

DAS

34

9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :	Step #:	QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation		Disposition				Completed By	
						Lead hand / Supervisor Approval Verification	
						QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
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Past Expiry Date ☐	☐ Manufacturing Process	OTHER :																							
Misidentified ☐	☐ Past Due																								

Picklist Print

May-07-15 2:41:06 PM

Page 1

Work Order ID: 132414

132414

Parent Item: D3393-1

D3393-1

Parent Item Name: Battery Lock Casing

Start Date: 5/07/15

Required Date: 5/07/15

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP A05.02.18New issueKJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch.	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.500X01.50 0		Purchased	No			100	f	35.0650	0.2708	2			

M6061T6B1 500X01 500

6061-T6 Bar 1.50 x 1.50

Location

Loc Qty

Loc Code

MAT004

35.065

M126043

33.79

M126075

1.275

1.6 JFC 2015-05-22

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

DART AEROSPACE LTD		Work Order: 132014
Description: Battery Lock Casing		Part Number: D3393-1
Inspection Dwg: D3393	Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.750	+0.010/-0.000	0.757	✓		Caliper	JFC-01
0.625	+0.010/-0.000	0.631	✓		"	"
Ø1.250	+/-0.010	1.252	✓		"	"
1.088	+/-0.010	1.087	✓		"	"
Ø0.734	+/-0.010	0.736	✓		"	"
2.658	+/-0.010	2.658	✓		"	"
1.550	+/-0.010	1.550	✓		"	"
0.125 x 45°	+/-0.010 x 0.5°	0.125x45°	✓		depth G	JFC-07
1.50	+/-0.030	1.498	✓		Caliper	JFC-01
0.750	+/-0.010	0.744	✓		"	"
Ø1.050	+/-0.010	1.050	✓		"	"
Ø1.000	+/-0.010	1.008	✓		"	"
0.338	+/-0.010	0.337	✓		depth G	JFC-07
0.563	+/-0.010	0.564	✓		Caliper	JFC-01
0.100	+0.000/-0.010	0.098	✓		micrometer	JFC-02 + JFC-07
3.00	+/-0.030	3.003	✓		Caliper	JFC-01
1.500	+/-0.010	1.498	✓		"	"
0.375	+/-0.010	0.375	✓		depth G	JFC-07
1.25	+/-0.030	1.246	✓		Caliper	JFC-01
0.125	+/-0.010	0.134	✓		depth G	JFC-07
30°	0.5°	30°	✓		Ang G	Shep

DAS

Measured by: JFC
Date: 2015-05-22

Audited by: 44
Date: 15/05/25

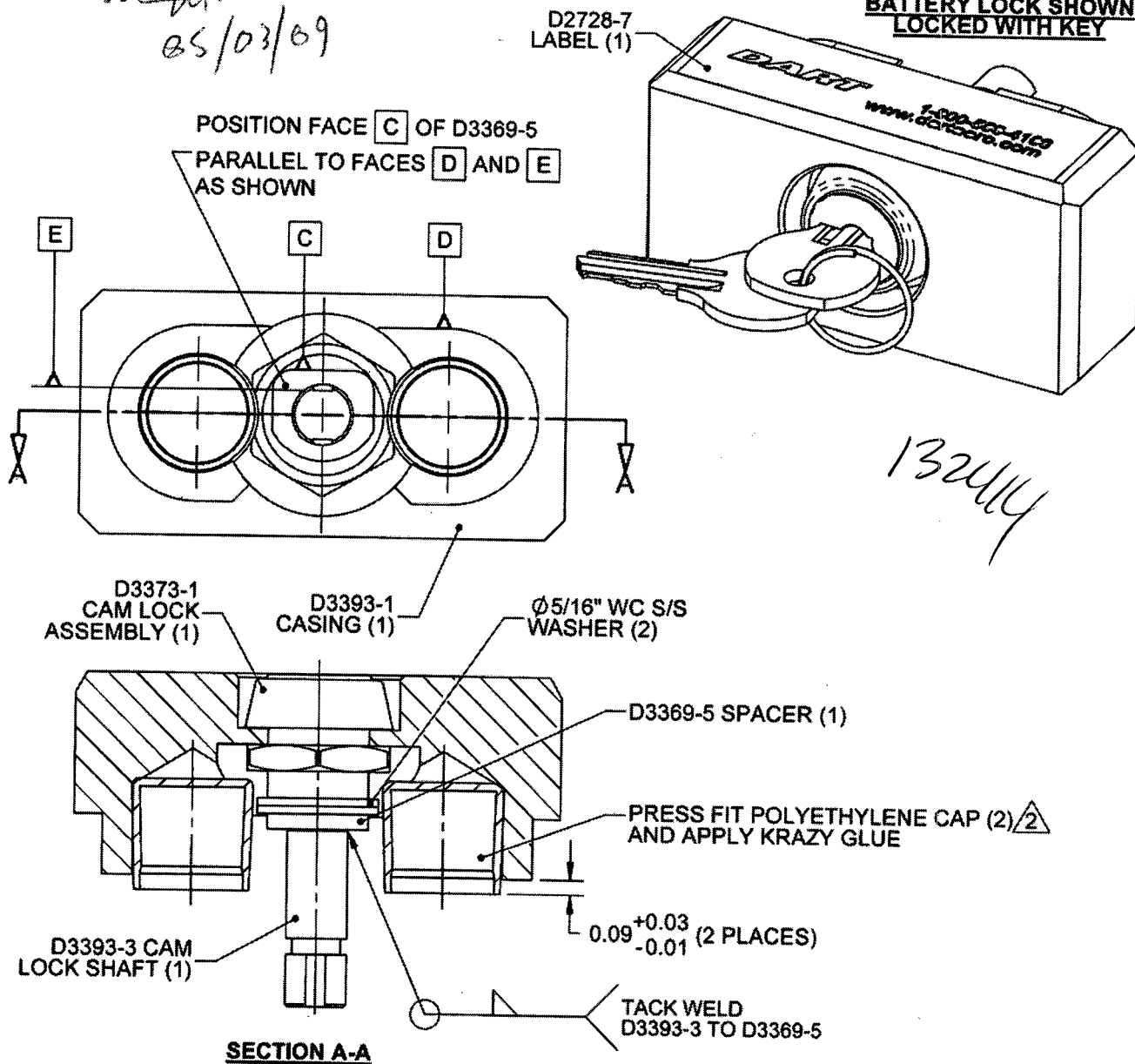
Prototype Approval: N/A
Date: N/A

Rev	Date	Change	Revised by	Approved
A	05.04.27	New Issue	KJ/JLM	
B	08.11.28	Tolerances revised	KJ/EC	



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3393	REV. A SHEET 1 OF 3
DATE 05.02.08		TITLE BATTERY LOCK	SCALE 1:1
A	05.02.08	NEW ISSUE	

RELEASED
[Signature]
05/03/09



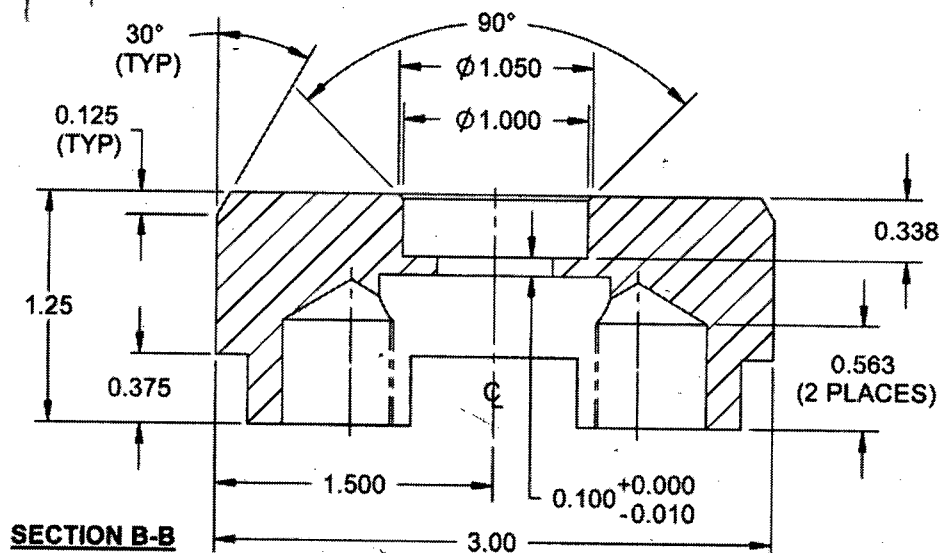
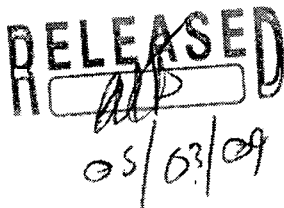
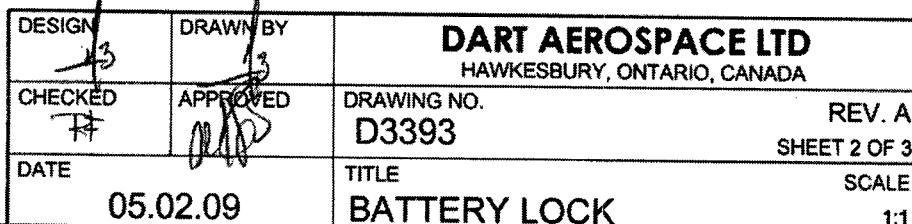
D3393-041 BATTERY LOCK ASSEMBLY

NOTES:

- 1) WELD PER DART QSI 004
- 2) POSSIBLE SUPPLIER: McMASTER-CARR, P/N 9567K21

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NOTES:

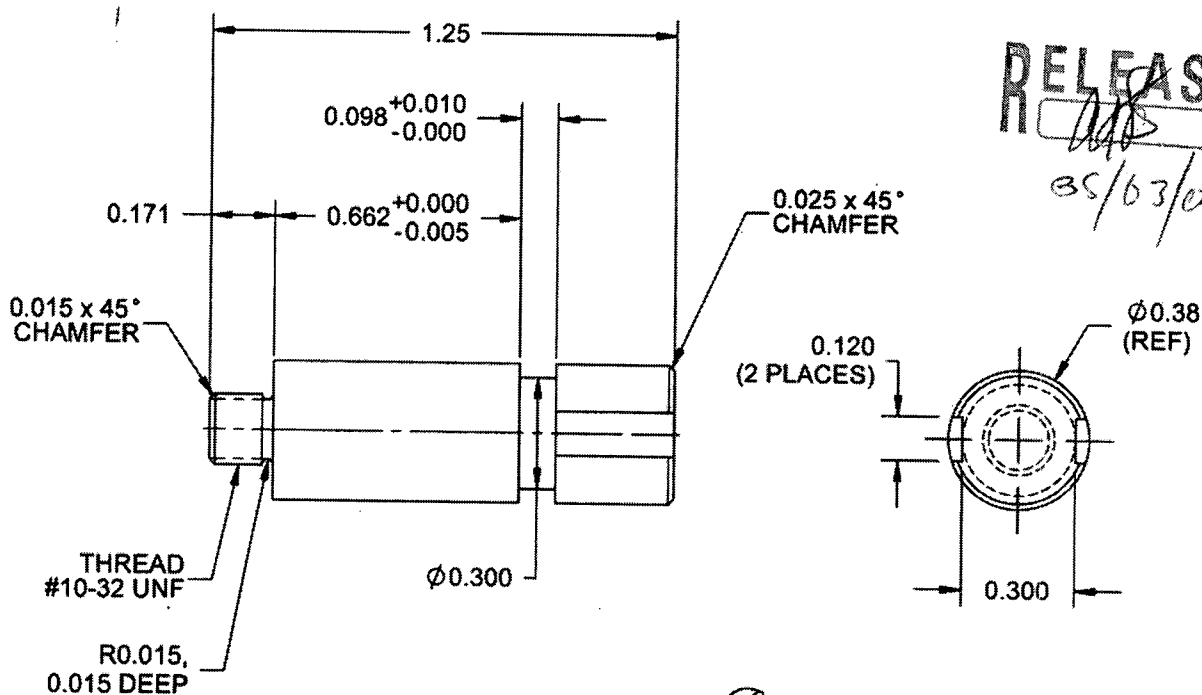
- 1) MATERIAL: 6061-T6/T651 (QQ-A-200/8 OR QQ-A-225/8)
(REF. DART SPEC. M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3393	REV. A SHEET 3 OF 3
DATE 05.02.09		TITLE BATTERY LOCK	SCALE 2:1



D3393-3 CAM LOCK SHAFT

NOTES:

- 1) MATERIAL: AISI 303 S.S. (REF. DART SPEC. M303R0.375)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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